

## REMARKS

### Summary

Claims 1-2 were pending. Claim 1 was rewritten and Claims 3-5 added. No new matter has been added as a result of this amendment. Claims 1-5 are pending after entry of this amendment.

### Rejection of Claims

In the Office Action, Claims 1-2 were rejected under 35 U.S.C. §102(e) as being anticipated by Levin (U.S. Patent 6,154,201). Applicant traverses the rejection.

Claim 1 recites a manual input device that comprises a manual control knob that is fitted with the drive shaft of an actuator and integrated with the actuator so as to be swingably manipulated. A first position sensor detects a direction and an amount of lateral movement of the actuator, with the amount of lateral movement detected at multiple locations along the same direction, and a second position sensor detects a direction and an amount of rotation of the driving shaft of the actuator. A controller inputs positional signals outputted from the first and second position sensors to control the actuator and applies an external force to the manual control knob according to the way the knob is manipulated. Thus, both the direction and amount of both lateral movement and rotation is detected and external forces are applied with respect to the manner in which the knob is manipulated. This permits increased functionality of the manual input device while permitting the user to know the direction and amount of movement through feedback without having to look at the knob.

Levin, on the other hand, teaches a manual input device that rotates and moves both laterally as well as transversely. However, Levin teaches that while the manual input device senses the direction of the lateral movement, it only senses the amount of movement if the amount is enough to activate the micro switches 52, i.e. it senses the amount of movement at only one location. Levin thus does not teach measuring the amount of lateral movement at multiple locations along the same direction, as recited in amended Claim 1. Nor does Levin teach a controller that controls the actuator in response to a combination of these signals (as well as the amount and direction of

rotation) or applies external force dependent on both the amount and the direction of lateral movement (or again in combination with the amount and direction of rotation).

For at least these reasons, Levin does not anticipate or disclose the arrangement of amended Claim 1. Thus, amended Claim 1 and Claims 2-5 are patentable over Levin.

### **Conclusion**

In view of the amendments and arguments above, Applicant respectfully submits that all of the pending claims are in condition for allowance. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned agent or attorney.

Respectfully submitted,



Anthony P. Curtis, Ph.D.  
Registration No. 46,193  
Agent for Applicant

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, ILLINOIS 60610  
(312) 321-4200